EPA CAPACITY ASSESSMENT: INTERIM SUBMISSION

The Foundations for Evidence-Based Policymaking Act (Evidence Act) provides a framework to promote a culture of evaluation and continuous learning to ensure agencies decisions are made using the best available evidence. The Evidence Act requires Chief Financial Officer Act agencies to conduct a capacity assessment to appraise their ability and infrastructure to carry out evidence-building activities. Agencies have been encouraged by the Office of Management and Budget (OMB) to "plan how they will assess the coverage, quality, methods, effectiveness, and independence of their statistics, evaluation, research, and analysis efforts... [to] provide a comprehensive view of agency capacity, while also ensuring that the review takes into account specific needs identified through the development of the agency's learning agenda."

This interim submission describes The U.S. Environmental Protection Agency's (EPA's) planned approach for conducting our capacity assessment, organized into three sections. Section I introduces the objectives of the capacity assessment and provides context about EPA. Section II describes the short and long-term focus of the capacity assessment. Section III lays out EPA's proposed approach to execute the capacity assessment. The Appendix briefly describes the options EPA considered but did not select.

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Section I: Introduction

Objectives of EPA's Capacity Assessment

EPA has both short- and long-term objectives for the capacity assessment:
- Short Term: understand EPA's capacity and needs for supporting the implementation of the Interim Learning Agenda.
- Long-Term: develop a maturity model approach to inform ongoing Agency capacity building as well as identifying EPA's capacity and needs for supporting the final Learning Agenda.

In keeping with the intent of the Evidence Act, the capacity assessment will aid EPA's efforts to identify our staffing and resource capabilities to implement the Learning Agenda (interim and final). By identifying our opportunities for improvement, it will catalyze action, identify priorities, and lead to EPA enhancing staff capacities to support evidence and evaluation activities.

EPA's Context

EPA's ability to pursue its mission to protect human health and the environment depends upon the availably and quality of data and evidence that support and inform environmental policies, decisions, guidance, and regulations. As a science-based organization, EPA is committed to

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developing and using evidence to achieve our mission. Evidence-building activities are governed by a myriad of EPA and governmentwide policies, standards, and guidance to promote the quality, reliability, and accuracy of the information EPA develops and/or uses to inform policy and decision making. These include (but are not limited to) EPA's Peer Review Policy and Handbook for internal and external review of scientific products, EPA's Information Quality Guidelines, EPA's Policy and Procedures on Protection of Human Subjects in EPA Conducted or Supported Research, EPA's Plan to Increase Access to Results of EPA-Funded Scientific Research, EPA's Guidelines for Preparing Economic Analysis, and EPA's Scientific Integrity Policy. EPA is also drafting a "Policy for Evaluations and Other Evidence-Building Activities" for release in FY 2021.

The Evidence Act builds on longstanding principles of good governance. Relatedly, EPA has longstanding performance measurement efforts incorporated throughout the Agency's work. Performance measurement is a part of the Agency's strategic plan development, annual planning and budgeting, operations and implementation, and accountability and results processes to inform decision-making. EPA also has a long history of deploying continuous improvement using Lean tools. More recently, the Agency has deployed a Lean Management System (LMS) designed to better integrate Lean tools with performance measurement in order to advance a culture of using data to support business process improvement and decision-making.

However, the Evidence Act drives EPA to reconsider its capacity to use evaluation, data, statistics, research, analysis and other evidence-building activities to support policymaking. For example, prior to the Evidence Act, EPA has not had mechanisms to invest consistently or substantially in evaluation for the purpose of evidence-based program design and decision-making. Small decentralized pockets of evaluation expertise exist within EPA, but most of this staff work supports evaluation projects on an ad hoc basis. The decentralized structure makes it challenging to know what different parts of the Agency are doing, such as the number and nature of evidence-building activities including evaluation. In response to the Evidence Act, EPA is reestablishing a centralized evaluation function to support and coordinate Agency evaluations and other evidence-building activities. EPA has included workforce investments in the FY2022 President's budget to support the Interim Learning Agenda; however, EPA does not have a plan designed to attract and retain evaluation expertise.

Section II: Capacity Assessment Focus

Our approach to the capacity assessment involves assessing EPA's ability to execute the Interim Learning Agenda first, and then developing a maturity model that would guide EPA's approach to building capacity for evaluation and other evidence-building activities. Organizations use maturity models to assess a current state or level of effectiveness in a specific discipline along with criteria for achieving the next desired level of performance. Both will include focus on developing and using evidence, as well as assessing the generation and use of data. In addition to identifying activities that will be addressed in the short- and long-term, for each element of

the capacity assessment we discuss why the approach was selected, the challenges we plan to address, how the effort will advance EPA's learning agenda, and coverage. Each component of the capacity assessment is described below. Our approach to conducting the capacity assessment is presented under the section titled Capacity Assessment Approach.

Short-term: Ability to answer the interim learning agenda's priority questions

In the short-term, we will assess the extent to which EPA has the necessary resources (expertise, capacity, and funding), data, technology, partners, organizations, and extramural vehicles to answer the Priority Questions in the Interim Learning Agenda. This assessment will generate information that may inform the scope, feasibility, timing, and implementation of the full Learning Agenda that will be part of the 2022-2026 Strategic Plan.

Furthermore, our understanding of the Agency's capacity to address the Priority Questions can facilitate our strategic approach to evaluation and evidence building and prioritize our investment in resources and staff. As we assess EPA's capacity to address the Priority Questions and employ a variety of evidence-building activities, we will consider the coverage, quality, methods, effectiveness, and independence of EPA's statistics, evaluation, research, and analysis, and other evidence-building efforts. EPA will also consider best practices for the use, protection, dissemination, and generation of data and the production of evidence for use in policymaking.

Long-term: Develop a maturity model and assess EPA's current state against the model

EPA will develop a maturity model that will serve as a road map to help the Agency establish an evidence-based culture where decisions are informed by evidence, and performance is routinely evaluated for potential improvements. The maturity model will inform Agency priorities and capacity building in critical areas.

The Agency's goal is to ensure that the maturity model is actionable and will drive EPA towards achieving its desired state/level of maturity in establishing an evidence-based culture. Implementation of the maturity model will enable the Agency to take stock and chart a path forward to ensure it makes progress in critically important areas to EPA. Looking forward, EPA will pursue a holistic approach that integrates the requirements of the Evidence Act with our ongoing strategic planning and budgeting, regulatory development, program management, scientific research, and continuous improvement efforts. This integration will reinforce the importance of each initiative and foster Agencywide long-term culture change.

The maturity model will identify the capabilities we need to acquire in order to improve performance. Moreover, it lays the foundation for a sustainable approach towards achieving the future state of a mature evidenced-based culture. It will also provide a framework against which to measure annual progress towards the future state. Additionally, it provides an opportunity to

integrate continuous improvement and learning, including EPA's LMS and evidence-building activities for a more holistic approach to performance management at EPA. This long-term strategy will require leadership and management support to maintain momentum and commitment.

A critical element of EPA's maturity model is the extent the Agency can produce data (measures, indicators) of enough quality and rigor for use in analyses, research, and evaluation. We will also determine the appropriateness of measures used to assess efficiency, effectiveness, and impacts. Additionally, we will explore the extent the Agency has the skill and expertise to analyze and interpret the evidence.

EPA's maturity model will include specific elements related to the use of performance management tools that facilitate an evidence-driven approach to improving efficiency of operations. The use of management tools, including performance metrics, are an important component of an evidence-based culture that ensures decisions are informed by quality data.

An examination of our measures as part of the maturity model will allow EPA to identify opportunities to improve data quality and revisit Agency performance measures that do not generate relevant information. Further, it will enable the Agency to identify gaps in performance measures and technical and analytical expertise.

Section III: Capacity Assessment Approach

The high-level steps in our proposed approach are described below. The steps for assessing our ability to execute the Interim Learning Agenda and develop the maturity model are being completed in parallel.

Interim Learning Agenda

EPA views the Interim Learning Agenda as an opportunity to learn by doing, including better understanding how to plan and implement evaluation activities, disseminate best practices and findings, and carry out capacity-building activities that engage employees and stakeholders. FY2021 is EPA's timeframe for developing the draft capacity assessment; with the named officials working primarily with learning priority leads and other Agency evaluation experts.

1. **Identify key stakeholders** – Identify and enlist key internal and external experts to bring the subject matter experience and professional perspective, identify potential data sources, and constraints and increase the quality of the final product.

2. **Outline the scope** – Set boundaries of the capacity assessment (what is included or excluded) based on the purpose, goals, and objectives of the Interim Learning Agenda.

3. **Identify existing background materials** – Gather internal and external information to determine a baseline understanding of the research, reports, and analyses that have been completed or are currently underway to answer the Priority Questions.

4. **Identify data collection strategy** – Identify the data sources, methods, and data collection instruments (survey/interviews) needed to answer the Priority Questions.

5. **Establish baseline indicators** – Identify and develop the criteria needed to understand the extent capability and capacity exists in the Learning Priorities.

6. **Gather data and information** – Implement/execute the data collection methodology.

7. **Analyze data** – Conduct a comparison of the information collected, interpret and summarize the data that identify existing capabilities and areas where gaps exist.

8. **Develop report** – Present capacity assessment findings which could include: challenges to answering Priority Questions, what gaps exist and the priority for filling them e.g., skills, data, technology, methodologies, capacity, and resources.

Maturity Model Approach

The final capacity assessment will include the maturity model and will build on what the Agency has learned from implementing the interim learning agenda. EPA will engage other federal agencies to learn about their maturity models and related priority setting and capacity building approaches. FY2021-FY2022 is the timeframe for developing the final capacity assessment working with EPA's Evidence Act Workgroup.

1. **Identify existing background materials** – Gather information to determine a baseline understanding of the research, reports, and analyses that have been completed or are currently underway to assess maturity in various focus areas.

2. **Identify key stakeholders** – Identify and enlist key internal and external experts to bring the subject matter experience and professional perspective, identify potential data sources, and constraints and increase the quality of the final product.

3. **Scope maturity model elements** – Establish the purpose, goals, and objectives of the maturity model to identify the boundaries (what is included or excluded) that will define the effort. The breadth and depth of the maturity model elements will be considered, specifically the coverage and application Agencywide or to specific EPA organizations. The scope will consider needs identified through the interim learning agenda analysis.

4. **Identify and gather data and information** – Identify the data sources, methods and data collection instruments (survey/interviews) needed to assess maturity for each element. Implement/execute the data collection methodology.

5. **Establish baseline indicators** – Identify and develop the criteria needed to understand the progression from one level to the next in the maturity model.

6. **Analyze data and information** – Conduct a comparison of the information collected, interpret and summarize the data to identify existing capabilities, deficiencies and areas where gaps exist. Prepare a report presenting the findings.

7. **Build maturity model** – Develop and present the model based on the scoping effort, indicators, and analysis.

8. **Submit draft capacity assessment (with maturity model) to OMB– September 2021**

Appendix: Other Options Considered

Gap Analysis

EPA considered conducting a gap analysis to assess the resources and knowledge needed to implement the Evidence Act (e.g., data, staff, expertise, dedicated funding, access to partners) but missing at the Agency. This approach would compare the actual to what is expected or desired. The identification of gaps could be used to identify specific recommendations and steps for developing an action plan to fully implement or achieve the desired/target state. However, this option was eliminated from further consideration because we recognize that to do an effective gap analysis, we would need a well-understood maturity model. Otherwise the gap analysis approach would be extremely broad and unwieldy.

Inventory of Existing Skills

EPA considered developing an inventory of the Agency's existing skills, expertise, resources, experience and abilities to implement the elements of the Evidence Act. For example, expertise and FTE (evaluators, statisticians, data managers, offices or teams), experience with specific methods (RCTs and behavioral insights) and analyses. The approach would assess and document the extent to which EPA has the infrastructure, data systems, and supporting policies. A final product could provide a robust and comprehensive inventory of the organization's existing capabilities as well as a baseline of the Agency's current and ongoing activities. Since the scope of this exercise would be very broad and require additional analysis to translate results into actionable next steps, it was omitted from further consideration.